Vational Cancer Institute

Synergizing Epidemiologic Research on Rare Cancers

Esophageal Cancer Working Group

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Chair: Wong-Ho Chow

Co-Chair: Daniela Seminara

Writer: Keith Richardson

Research Advances and Gaps: What are the status of research in this area?

	Adenocarcinom a	Squamous Cell Carcinoma
Incidence	Increasing	Decreasing
Precursor state	Barrett's esophagus	None
Known risk factors	Smoking Excess BMI GERD	Smoking Alcohol drinking
Other risk factors	H. pylori: inverse Diet	H. pylori: positive Diet

Research Advances and Gaps:

What are the highest research priorities and scientific gaps in this area?

- Better tumor classification (histologic, subsite, biomarkers)
- Refine association with known lifestyle and environmental risk factors
- Identify new environmental and lifestyle risk factors
- Understand underlying causes for gender, race and ethnicity disparities in incidence

Research Advances and Gaps (continued):

What are the highest research priorities and scientific gaps in this area?

- Suggestive but limited data on genetic susceptibility. Need further studies to
 - a) identify susceptibility genes and pathways and
 - b) evaluate their interaction with known risk factors
- Need to establish high-risk cohort of Barrett esophagus to study risk factors (genetic and environmental) and markers of tumor progression and early detection
- Need follow-up of case series to investigate determinant of survival

Research Obstacles and Challenges: What are the main obstacles in research in this area?

- Small numbers (lack of large, well designed studies)
- Data sharing issues
- Communication among different groups studying the same type of tumor at the national and international level
- Transparency to scientific community
- Targeted Funding Funding Funding (support of both science and infrastructure)

Research Obstacles and Challenges: How can we overcome such obstacles?

- Fostering of consortium focusing specifically on Barrett and esophageal cancer as a forum for scientific communication and "research hub" for specific projects targeting the priority areas.
- Establishing public website to inform the scientific community about current consortium activities
- Identify (or develop if missing) targeted initiative and mechanisms to specifically support largescale research in this area
- Actively encourage participation of young investigators through appropriate mentorship and funding mechanisms

Collaborations:

What type of collaborations are most fitting for this area

 Existing consortia (BEACON, IARC) are essential to perform the needed high priority studies because of the rarity of esophageal cancer, the need for large numbers and the need to examine different subtypes.

Next Steps:

What do you see as the next steps to foster research in this area (i.e. by NCI, investigators, advocacy groups, etc.)?

- Investigators: active participation in consortia efforts
- NCI: target the listed priority areas, especially for esophageal adenocarcinoma
- Advocacy Groups: get involved and actively support the researchers' efforts